A New Approach in Computational Science

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2Mflop/s '85-90 SP-1
18Mflop/s '88-97 SP-2
7.7Gflop/s '90-7 iPSC/860
35Gflop/s '92-9 XP/S-35
150Gflop/s '95-9 XP/S-150
1.1Tflop/s '00-? WinterHawk-2
4.5Tflop/s '02-? Power4
2.3Tflop/s '03-? X1
100Tflop/s
Relative performance increase of Ising model simulations (■) compared the normalized speed of the computers (●) the simulations were executed on. The dashed line is a schematic of the increase in peak performance of the fastest supercomputers since 1972.
New Approach: Facilities/End Station Analogy

Facility

End Station

Fusion Materials End Station
Materials : Math : Computer Scientists
- Open Source Repository
- Object Oriented Tool Kit
- Standardized I/O
- Workshops/Education